

CLAIMS

1. A digital camera comprising;

a camera body;

5 a photographing optical system that forms a subject image;

a lighting unit including a light-source device that emits
light in a predetermined direction; and

a liquid crystal display (LCD) panel that selectively
transmits light emitted by said light-source device to display said
10 subject image;

wherein the camera body has a first space to attach said
light-source device in front of said LCD panel and a second space to
attach said light-source device at the rear of said LCD panel, and
said LCD panel transmits light so as to display a non-inverted image
15 when viewed from the rear side of said digital camera.

2. The digital camera according to claim 1, wherein said lighting
unit is shaped to be attached in said first space and said second
space, said lighting unit being detachably and manually attached in
one of said first space and said second space.

20 3. The digital camera according to claim 1, wherein said lighting
unit is shaped to be attached in a single space comprising said
first space and said second space, said lighting unit being
detachably and manually attached to said camera body.

4. The digital camera according to claim 3, wherein said lighting
25 unit is U-shaped, and said light-source device is provided in one of

the two bar-shaped members of said U-shaped lighting unit, and said one of the two bar-shaped members is attached in said first space or said second space selectively, and another bar-shaped member is attached in one of said first space or said second space that said one of the two bar-shaped members is not attached in.

5 5. The digital camera according to claim 2, wherein said camera body has leading grooves that run along a line from a left side surface to a right side surface of said digital camera and that determine the direction in which said lighting unit is attached, and said lighting unit has a guide rail that slides along and engages with said leading grooves.

10 6. The digital camera according to claim 3, wherein said camera body has a guide rail that runs along a line from the top surface to the bottom surface of said digital camera and that determines the direction in which said lighting unit is attached, and said lighting unit has a leading groove that slides along and engages with said guide rail.

15 7. The digital camera according to claim 5, wherein said camera body has body-side electric connecting points arranged along said leading grooves to supply electric power to said lighting unit, and said lighting unit has unit-side electric connecting points arranged along said guide rail to connect to said body-side electric connecting points.

20 8. The digital camera according to claim 6, wherein said camera body has body-side electric connecting points arranged along said

25

guide rail to supply electric power to said lighting unit, and said lighting unit has unit-side electric connecting points arranged along said leading groove to connect to said body-side electric connecting points.

5 9. The digital camera according to claim 5, wherein said light-source device has a light-emitting surface that emits light in a predetermined direction, and said leading grooves have asymmetrical shapes from right to left for said lighting unit to be attached so that said light-emitting surface faces said LCD panel.

10 10. The digital camera according to claim 6, wherein said light-source device has a light-emitting surface that emits light in a predetermined direction, and said leading groove has a symmetrical shape from right to left for said lighting unit to be attached so that said light-emitting surface faces said LCD panel.

15 11. The digital camera according to claim 1, wherein said light-source device has a light-emitting surface that emits light in a predetermined direction, and said light-source device is selectively arranged in one of said first space and said second space for said lighting unit to be attached so that said light-emitting surface faces said LCD panel.

20 12. A digital camera body comprising;
a photographing optical system that forms a subject image; and
an LCD panel that selectively transmits light emitted by a lighting unit including a light-source device to display said

25 subject image;

wherein said camera body has a first space and a second space to attach said light-source device at the front side of said LCD panel or at the rear of said LCD panel, and said lighting unit is detachably attached in one of said first space and said second space for said light-source device so as to be arranged in one of said first space and said second space selectively, and said LCD panel transmits light emitted by said lighting unit to display a non-inverted image when viewed from the rear of said LCD panel.

13. A lighting unit that is detachably attached to the digital camera body described in claim 12, comprising;

a light-source device that emits light; and

a light leading member that leads light emitted by said light-source device to radiate in a predetermined direction.

14. A digital camera comprising;

a photographing optical system that forms a subject image;

a lighting unit including a light-source device that emits light in a predetermined direction; and

an LCD panel that selectively transmits light from said lighting unit to display said subject image, and that is arranged in a digital camera body so that a first panel surface faces a front side of said camera and a second panel surface located at the opposite side of said first panel surface, faces a rear side of said camera;

wherein said lighting unit is attached to said camera body so that said light-source device is selectively arranged at one of

said first panel surface side and said second panel surface side,
and said LCD panel transmits light to display a non-inverted image
when viewed from the rear of said digital camera.

15. A digital camera body comprising;

5 a photographing optical system that forms a subject image;
a lighting unit including a light-source device that emits
light in a predetermined direction; and

an LCD panel that selectively transmits light from said
lighting unit to display said subject image, and that is arranged so
10 that a first panel surface faces a front direction of said camera
and a second panel surface located at the opposite side of said
first panel surface, faces in a rear direction of said camera;

wherein said lighting unit is detachably attached so that said
light-source device is selectively arranged at one of said first
15 panel surface side and said second panel surface side, and said LCD
panel transmits light to display a non-inverted image when viewed
from the rear of said digital camera.

16. A lighting unit that is detachably attached to a digital
camera body described in claim 15 comprising;

20 a light-source device that emits light; and
a light leading member that leads light emitted by said
light-source device in a predetermined direction.

17. A photographing display apparatus comprising;

a light-source device that emits light;

25 a light modulator unit that has a first surface facing a first

side which is a subject side and a second surface facing an opposite side of said first side, and that selectively transmits light emitted by said light-source device from said first surface to said second surface, or from said second surface to said first surface to display a subject image formed by a photographing optical system;

wherein said light-source device is selectively arranged in one of said first surface side and said second surface side, and said light modulator unit transmits light emitted by said light-source device to display a non-inverted image when viewed from said second side.

18. A method for displaying a photograph image comprising:

emitting light in a predetermined direction;

arranging a light-source device for emitting light, selectively in one of a first side and a second side of a light modulator unit that has a first surface facing said first side which is a subject side and a second surface facing said second side which is an opposite side of said first side, and that selectively transmits light emitted by said light-source device from said first surface to said second surface, or from said second surface to said first surface to display a subject image formed by a photographing optical system; and

transmitting light emitted by said light-source device to display a non-inverted image when viewed from said second side.

19. A digital camera comprising;

a camera body;

a photographing optical system that forms a subject image;
a plate-shaped lighting unit including a light-source device
that emits light in a predetermined direction; and

an LCD panel that selectively transmits light from said
5 plate-shaped lighting unit to display said subject image;

wherein the camera body has a first space to attach said
plate-shaped lighting unit in the front of said LCD panel and a
second space to attach said plate-shaped lighting unit at the rear
of said LCD panel, and said LCD panel transmits light from said
10 plate-shaped lighting unit to display a non-inverted image when
viewed from the rear side of said digital camera.

20. A digital camera comprising;

a camera body;

a photographing optical system that forms a subject image;

15 a U-shaped lighting unit including a light-source device that
emits light in a predetermined direction; and

an LCD panel that selectively transmits light from said U-
shaped lighting unit to display said subject image;

wherein the camera body has a first space and a second space
20 that are connected from a camera front side to a camera rear side,
and said light-source device is formed in one of two bar-shaped
members of said U-shaped lighting unit, and said U-shaped lighting
unit is selectively and detachably attached to said first space and
said second space that are connected so that said light-source
25 device is arranged in said first space and said second space, and

said LCD panel transmits light from said U-shaped lighting unit to display a non-inverted image when viewed from the rear side of said digital camera.